INTRODUCTION

In March 2012, the authors who collaborated in the production of the two-volume *Galileo's O* came together for a final symposium to celebrate its publication in Berlin at the Max-Planck-Institute for the History of Science. The symposium took place in a mood of certainty that a book had seldom before been examined in such a broad and deeply interdisciplinary manner as Galileo's *Sidereus Nuncius* (1610), the subject of the two-volumes of *Galileo's O*. The participants gave lectures about the consequences of what had been achieved as well as about their new horizons of research. As a guest speaker, Irving Lavin (Princeton, Institute for Advanced Study) gave an evening talk on Galileo and Claude Mellan.

The core element of the research project that had been conducted over several years, the *Sidereus Nuncius Martayan and Lan (SNML)*, had been suspected of being a forgery,² but the evidence of authenticity seemed so unequivocal that none of the authors thought them questionable. All participants had used the method of negating the possibility of forgery, instead of attempting to confirm the opposite. The paper and printing seemed undeniably authentic, the watermarks closely matched the ones found on other copies of the *Sidereus Nuncius* and the limp vellum book cover as well as the rest of the Sammelband were genuinely old. In addition, scientific analysis did not produce evidence that any of the materials, including the paper and the printing ink, were modern. The same was true of the inks that were used for the moon drawings and signature. The examination of each of the altogether 82 copies that are still extant worldwide showed that the *SNML* contains a higher number of print errors than any other exemplar, so that its status as the proof-copy seemed to be secure. The stylistic comparison with known drawings from Galileo's hand showed intimate resemblances. In combination with a number of other points this did not leave any doubt that the *SNML* was authentic.

One month later, in May 2012, Nick Wilding exchanged information with Paul Needham, arguing that despite all of this evidence the *SNML* displayed elements of a forgery. After verifying Wilding's observations, Needham added new insights that made it impossible for him not to see the *SNML* as a modern forgery. Wilding's and Needham's investigations from the time between May and June 2012 are reported in the first chapter of this book.

- 1 Galileo's O, vols. I and II (ed.: Horst Bredekamp). Vol. I: Galileo's Sidereus Nuncius. A comparison of the proof copy (New York) with other paradigmatic copies (eds.: Irene Brückle and Oliver Hahn), Berlin: Akademie Verlag, 2011. Vol. II: Paul Needham, Galileo Makes A Book. The first edition of Sidereus Nuncius Venice 1610, Berlin: Akademie Verlag, 2011.
- Owen Gingerich, The Curious Case of the M-L Sidereus Nuncius, in: Galilaeana, 6 (2009), pp. 141–165.

The reactions to the news within the group of collaborators on *Galileo's O* were divided. On the one hand, nobody denied the logical rigidity of the newly presented facts. On the other hand, the conclusion that the *SNML* was authentic had been founded on such a firm basis that it seemed unimaginable suddenly to change one's mind. Being confronted with this dilemma, it seemed unavoidable but to take up the investigations once again.

The condition for reopening the investigation was to have undeniably authentic as well as clearly forged copies at hand in order to compare both the materials as well as the techniques of making the books. The owner of the *SNML* returned the book to the Kupferstich-kabinett in Berlin for examination, and the University Library of the Karl-Franzens-University of Graz allowed a first-hand comparison of its prestigious copy of the *Sidereus Nuncius* with the *SNML* in Berlin.

The attempts to find an authenticated forgery of the *Sidereus Nuncius*, though, were not successful, and the idea instead was to bring Galileo's *Compasso* from the Biblioteca del Seminario in Padua (Italy), newly brought to the attention of the team as a forgery, together with an authentic *Compasso*. Thanks to the generosity of the Universitäts- und Landesbibliothek Darmstadt, the only German library to possess a first edition of the *Compasso*, this copy could be kept in Berlin for more than one week. The *Compasso* from Padua, however, was prevented from leaving Italy at the last moment, as it became a possible evidence in a lawsuit. For this reason Needham, after having examined the Darmstadt copy, immediately studied the forged *Compasso* in Padua by generous permission of Riccardo Battocchio, head of the Biblioteca del Seminario. Irene Brückle (Stuttgart) and Manfred Mayer (Graz) also examined this book a couple of weeks later (November 2012).

In addition, two forged sheets of a Jesuit book printed in Lima in 1650, were made available to the research group in Berlin. During the second week of October 2012, the number of authentic and forged materials relating to Galileo had, according to our knowledge, never before been brought together. During this week Horst Bredekamp and Alexis Ruccius (Humboldt-University, Berlin), Irene Brückle (Staatliche Akademie der Bildenden Künste, Stuttgart), Werner Busch (Freie Universität, Berlin), Oliver Hahn (Bundesinstitut für Materialforschung, Berlin), Manfred Mayer (Karl-Franzens-University of Graz), Paul Needham (Princeton University) and Theresa Smith (Harvard University) examined the complete material. During this week, Nicholas Pickwoad (Ligatus Research Centre, University of the Arts, London) joined the group in order to examine the binding of the *SNML*. In addition, Thomas Schulze (Hochschule für Technik, Wirtschaft und Kultur, Leipzig), a specialist in historic printing methods, and Gangolf Ulbricht (Werkstatt für Papier, Berlin), examined the paper and the printing technique of the *SNML*. Debora Dyer Mayer, Helen H. Glaser Conservator at the Weissman Preservation Center at Harvard University, conducted the fibre analysis.

Through the utmost generosity of Heinrich Schulze Altcappenberg, head of the Kupferstichkabinett in Berlin, Georg Josef Dietz, head of the conservation department, and

- 3 Galileo Galilei, Le Operazioni del Compasso Geometrico et Militare, Padova 1606. Biblioteca del Seminario, Padova.
- 4 Galileo Galilei, Le Operazioni del Compasso Geometrico et Militare, Padova 1606. ULB Darmstadt, Nr. 31.A.167.
- 5 Juan Vazquez de Acuna, Galileo Galilei, Filósofo e Mathemático, Lima 1650.

Fabienne Meyer, assistant conservator there, the investigations were performed in the laboratory of the Kupferstichkabinett in Berlin. The whole group was able to work together throughout an entire week, having received permission to use the instruments available at the Kupferstichkabinett and the Bundesanstalt für Materialforschung.

There is no need to mention that the entire investigation had a psychological dimension that is not easy to explain. The whole group, and especially Bredekamp and Needham who had done the main work in confirming the authenticity of the *SNML*, were and are deeply concerned by the falsification of their former opinion, as not many results are worse than a refuted authentication. The research undertaken between May and October 2012 was effected in a mixture of pain, self-reproach, anger, curiosity and a spirit of collaboration rarely experienced before. Notwithstanding the rather somber frame of the research project, it was one of the most fruitful undertakings for everybody who participated in the investigation.

Before starting it was agreed that the results and opinions would be published, even if they turned out to be conflicting. With the *SNML*, the forgery of early modern books has reached a rare if not entirely novel level of "perfection", so it seemed necessary to expose and publish even opposing views. As in the previous investigations that gave rise to *Galilei der Künstler*⁶ and *Galileo's O*, all costs were covered by funds from the *Max-Planck-Forschungspreis* 2006 and the institutions involved in the project. From the beginning, no funds were accepted from the owner or private sources, in order to guarantee the strictest neutrality towards the results. In this the project remained sincere. Thanks go to all the individuals and institutions that participated.

At first glance, the results offered by the present volume might seem disastrous to the two volumes of *Galileo's O*. However, in our view, despite their errors they still mark a new understanding of the making of early modern books.⁷ It is indeed somewhat ironic: had the volumes of *Galileo's O* not developed a certain microscopic perspective towards the making and the material of the book, they could not have been falsified. It is therefore all the more necessary to publish this third volume in order to establish a sensitivity towards phenomena that lead the same essential thoughts astray.

The final reason for publishing this additional volume lies in the fact that even now not all the problems posed by the *SNML* can be solved: the presence of double-printing, the black material on top of the drawings, the style of the drawings, and the level of knowledge that has gone into this fraudulent book. Considering the sophistication of the forgery, it is apparent that years of profound research are necessary in order to construct what the *SNML* represents.

- 6 Horst Bredekamp, Galilei der Künstler. Der Mond. Die Sonne. Die Hand: Berlin 2007.
- 7 To give two significant examples: Previous to Bredekamp's *Galilei der Künstler* (2007) and Needham's *Galileo Makes a Book* (*Galileo's O*, Vol. II), little more was known about the Venetian book printer Tomasso Baglioni, who produced the *Sidereus Nuncius*, than his name (Bredekamp, 2007, pp. 115–121; Needham, 2011, passim). As to the illustrations of the moon, it was not even fully understood that they were not woodcuts or engravings, but etchings, and even after *Galilei der Künstler*, the woodcuts of the Frankfurt illegal print from autumn 1610 were occasionally confounded with the etchings of the original Venetian production of the book in March 1610.

The *SNML* is probably the "Masterpiece" of the forgeries that have been produced by Massimo De Caro, the notorious figure who was jailed in Italy while we were producing this book. The question of who made the *SNML* was not the focus of the participants. We each followed the method of close reading, not looking at the circumstances, but focusing on the evidence that the material substance as such would offer.

On Dec. 16, 2013, *The New Yorker* published an article that dealt in great length with the matter exposed in this book. In this brilliant essay, the author, Nicholas Schmidle, tells the story of Marino Massimo De Caro, an independent Galileo-researcher and antiquarian, who turns out to be one of the most potent forgers in book-history. Schmidle focuses his essay around the *SNML* and confirms that De Caro produced it. Further, he reports De Caro's version of how it was fabricated: in Argentina, in collaboration with a papermaker who produced the seemingly-old paper and a painter or "art restorer" who simulated the hand of Galileo. Creating the aged look involved heating the materials to age them artificially, among other techniques.

We considered incorporating this new information in our present book, but as we were already at the proof stage, decided not to do so. The additional fact checking required would have entailed a potentially lengthy investigation in collaboration with the police to solve questions such as the provenance of the amputated Sammelband. Another reason not to discuss the "secrets" De Caro volunteered lies in the observation that they are incomplete and, in parts, contradict evidence presented in our book. The points Schmidle reports might come close to the truth, but it could also be that De Caro, by bringing them forward, obfuscates crucial facts to protect himself and his collaborators.

The present book thus reports, as intended, the findings gathered during our 2012–13 investigation and avoids a response to the perspective on De Caro presented in Schmidle's article. It is an irony that De Caro may have improved his tale by studying *Galileo's O*, published in 2011, such as when he reflects on the deep print impression of *SNML*. We hope that whatever further detail – technical, criminal, psychological or otherwise - may come to light concerning this unprecedented forgery, it will not be used by the faker in the attempt to embellish his dubious fame. At any rate, we hope that the reader may enjoy this volume that for us meant special strain, and at this very minute provides us with the delight of seeing it go to print.

Horst Bredekamp Irene Brückle Oliver Hahn Manfred Mayer Paul Needham Nicholas Pickwoad Theresa Smith

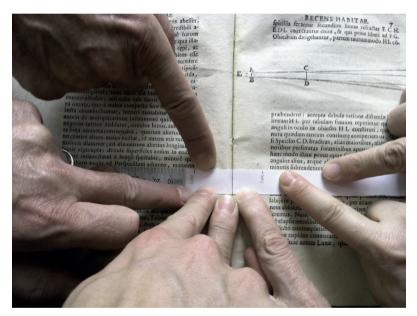


Fig. 1: Comparing the distance between the type pages in the printing formes of SNML and a genuine SN copy. The paper strip, marked with the distance in SNML, is positioned across pages 6v/7r of the SN Graz (see p. 26). The photograph was taken October 10, 2012 during our Berlin meeting.